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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/248,158	02/09/99	YUAN	Z 342312000600

HM12/0119

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EXAMINER	
GARCIA, M	
ART UNIT	**PAPER NUMBER**
1627	8

DATE MAILED: 01/19/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.	Applicant(s)
09/248,158	Yuan et al
Examiner	**Group Art Unit**
Maurie E. Garcia, Ph. D.	1627

☐ Responsive to communication(s) filed on _____

☐ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire _____*ONE*_____ month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) *1-28* _____ is/are pending in the applicat

Of the above, claim(s) _____ is/are withdrawn from consideration

☐ Claim(s) _____ is/are allowed.

☐ Claim(s) _____ is/are rejected.

☐ Claim(s) _____ is/are objected to.

☒ Claims *1-28* _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____ .

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

☒ Notice to Comply with Sequence Rules

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

DETAILED ACTION

Please note: The number of Art Unit 1618 has been changed to 1627. Please direct all correspondence for this case to **Art Unit 1627**.

Sequence Compliance

1. This application contains sequence disclosures that are encompassed by the definitions for nucleotide and/or amino acid sequences set forth in 37 CFR 1.821(a)(1) and (a)(2). However, this application fails to comply with the requirements of 37 CFR 1.821 through 1.825 for the reason(s) set forth on the attached Notice To Comply With Requirements For Patent Applications Containing Nucleotide Sequence And/Or Amino Acid Sequence Disclosures.

Election/Restriction

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-20, drawn to a method for analyzing a sample, classified in class 436, subclass 57.

II. Claims 21-28, drawn to a plate suitable for a direct adsorption binding assay, classified in class 435, subclass 305.2.

3. The inventions are distinct, each from the other because of the following reasons:

4. Groups I and II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case, the plate of Group II could be to practice a different process such as a scintillation proximity assay. Furthermore, the process as claimed could be practiced with a different apparatus such as small beads.

5. These inventions have acquired a separate status in the art as shown by their different classification and divergent subject matter. The inventions would require different searches, and there is no expectation that the searches would be coextensive. Therefore, this does create an undue search burden, and restriction for examination purposes as indicated is proper.

6. This application contains claims directed to patentably distinct species of the claimed invention:

Group I: If applicant elects the invention of Group I applicant is required to elect from the following patentably distinct species. One species from each of the following subgroups should be elected:

Subgroup 1: Molecular-property based binding affinity

a. Positive charge
b. Negative charge
c. Dipole moment
d. Hydrophobicity

Subgroup 2: Type of enzyme catalyzed reaction

a. Kinase catalyzed	Claims 10 & 20
b. Lipase catalyzed	Claims 10 & 20
c. Phosphatase catalyzed	Claims 10 & 20

d.	Protease catalyzed	Claims 10 & 20
e.	tRNA transferase catalyzed	Claims 10 & 20
f.	Rxn cascade for UDP-NAcMur-pentapeptide	Claims 11-18 & 20**see below

If **2f is selected above, then a further election is necessary from the following:

Subgroup 3: Enzymes for reaction cascade for UDP-NAcMur-pentapeptide

a.	Entire cascade	Claims 11, 18 & 20
b.	MurA	Claims 11, 12 & 20
c.	MurB	Claims 11, 13 & 20
d.	MurC	Claims 11, 14 & 20
e.	MurD	Claims 11, 15 & 20
f.	MurE	Claims 11, 16 & 20
g.	MurF	Claims 11, 17 & 20

The species are distinct, each from the other, because their materials for carrying out the method and the substances that can be analyzed is different. For Subgroup 1, each of the properties would differ in how it was measured (i.e. a positively charged product will require a negatively charged surface for binding, while the opposite is true for a negatively charged product, etc.). For each of the enzyme catalyzed reactions, this is also true because the structures, reactivity and modes of action of each of the reactants/products are different (see the instant specification, page 13, line 15 through page 14, line 25 and page 17, line 1 through page 19, line 5). Therefore, the groups have different issues regarding patentability and represent patentably distinct subject matter.

Group II: If applicant elects the invention of Group II applicant is required to elect from the following patentably distinct species. One species from the following subgroups should be elected:

Subgroup 1: Type of plate

a.	Plate comprises a scintillating material	Claims 21 & 23-28 ++see below
b.	Plate comprises wells coated with a scintillating material	Claim 22

++If **1a** is selected above, then a further election is necessary from the following:

Subgroup 2: Derivatization of wells

a.	Positively charged	Claims 23 & 26
b.	Negatively charged	Claims 24 & 27
c.	Hydrophobic	Claims 25 & 28

The species are distinct, each from the other, because their structures are different, i.e. the apparatuses would be comprised of different components. For the species of derivatized wells, they would differ in the starting materials from which they are made (different

chemical structures, see claims 26-28) and in their reactivity. Therefore, the groups have different issues regarding patentability and represent patentably distinct subject matter.

7. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

8. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

9. Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

10. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the

evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

11. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

12. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

13. Applicant is also reminded that a 1 - month (not less than 30 days) shortened statutory period will be set for response when a written requirement is made without an action on the merits. This period may be extended under the provisions of 37 CFR 1.136(a). Such action will not be an "action on the merits" for purposes of the second action final program, see MPEP 809.02(a).

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maurie E. Garcia, Ph.D. whose telephone number is (703) 308-0065. The examiner can normally be reached on Monday-Thursday and alternate Fridays from 8:30 to 6:00.

15. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald E. Adams, Ph.D., can be reached on (703) 308-0570. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-4242. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.0

Maurie E. Garcia, Ph.D.
January 14, 2000

BENNETT CELSA
PRIMARY EXAMINER
1/14/00

UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
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SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
09/248158	2/9/99	Yuan, et al	342312000600

EXAMINER	
Maurie E. Garcia, Ph. D.	
ART UNIT	PAPER NUMBER
1627	

DATE MAILED:

Notice to Comply

Please find below a communication from the EXAMINER in charge of this application

This application contains sequence disclosures that are encompassed by the definitions for nucleotide and/or amino acid sequences set forth in 37 CFR 1.821(a)(1) and (a)(2). However, this application fails to comply with the requirements of 37 CFR 1.821 through 1.825 for the reason(s) set forth on the attached Notice To Comply With Requirements For Patent Applications Containing Nucleotide Sequence And/Or Amino Acid Sequence Disclosures.

Any inquiry concerning this communication should be directed to Examiner **Maurie E. Garcia, Ph. D.**, Art Unit **1627**, whose telephone number is **(703) 308-0065.**

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center receptionist whose telephone number is (703) 308-0196.

APPLICANT IS GIVEN A ONE MONTH EXTENDABLE PERIOD WITHIN WHICH TO COMPLY WITH THE SEQUENCE RULES, 37 CFR 1.821 - 1.825. Failure to comply with these requirements will result in ABANDONMENT of the application under 37 CFR 1.821(g). Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136. In no case may an applicant extend the period for response beyond the six month statutory period. Applicant is requested to return a copy of the attached Notice to Comply with the response.

BENNETT CELSA
PRIMARY EXAMINER

1/14/00

Application No.: 09/248158

NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES

The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 C.F.R. 1.821 - 1.825 for the following reason(s):

☒ 1. This application clearly fails to comply with the requirements of 37 C.F.R. 1.821-1.825. Applicant's attention is directed to these regulations, published at 1114 OG 29, May 15, 1990 and at 55 FR 18230, May 1, 1990.

☒ 2. This application does not contain, as a separate part of the disclosure on paper copy, a "Sequence Listing" as required by 37 C.F.R. 1.821(c).

☒ 3. A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 C.F.R. 1.821(e).

☐ 4. A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing."

☐ 5. The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A Substitute computer readable form must be submitted as required by 37 C.F.R. 1.825(d).

☐ 6. The paper copy of the "Sequence Listing" is not the same as the computer readable from of the "Sequence Listing" as required by 37 C.F.R. 1.821(e).

☐ 7. Other: _____

Applicant Must Provide:

☒ An initial or substitute computer readable form (CRF) copy of the "Sequence Listing".

☒ An initial or substitute paper copy of the "Sequence Listing", as well as an amendment directing its entry into the specification.

☒ A statement that the content of the paper and computer readable copies are the same and, where applicable, include no new matter, as required by 37 C.F.R. 1.821(e) or 1.821(f) or 1.821(g) or 1.825(b) or 1.825(d).

For questions regarding compliance to these requirements, please contact:

For Rules Interpretation, call (703) 308-4216
For CRF Submission Help, call (703) 308-4212
PatentIn Software Program Support (SIRA)
Technical Assistance.....703-287-0200
To Purchase PatentIn Software.....703-306-2600

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